

Amendments

In the Claims:

Claims 1-44 (Previously canceled).

Claim 45 (Previously presented): A composition comprising one or more restriction endonucleases and one or more polymerase inhibitors, wherein said one or more polymerase inhibitors are selected from the group consisting of: an antibiotic, a heavy metal, an acid, a nucleotide analogue, an anionic detergent, a polyanion, captan ((N-[trichloromethyl]-thio)-4-cyclohexene-1,2-dicarboximide), an acidic polysaccharide, a binding protein or peptide, and combinations thereof; wherein said composition does not contain any nucleic acid molecules.

Claims 46-48 (Previously cancelled).

Claim 49 (Original): The composition of claim 45, wherein said restriction endonucleases and/or polymerase inhibitors are stable upon storage.

Claim 50 and claim 51 (Previously cancelled).

Claim 52 (Original): The composition of claim 45, further comprising one or more buffers.

Claim 53 (Previously presented): A composition comprising one or more restriction endonucleases and one more polymerase inhibitors, wherein said one or more polymerase inhibitors are one or more antibodies or fragments thereof, and wherein said composition does not contain any nucleic acid molecules.

Claim 54 (Previously presented): The composition of claim 53, wherein said one or more antibodies are selected from the group consisting of anti-*Taq* antibodies, anti-*Tma* antibodies, anti-*Pfu* antibodies and fragments thereof.

Claim 55 (Previously presented): The composition of claim 53, wherein said composition is stable upon storage.

Claim 56 (Previously presented): The composition of claim 53, further comprising one or more buffers.

Claim 57 (Currently cancelled).

Claim 58 (Currently cancelled).

Claim 59 (New). A composition comprising one or more polypeptides having polymerase activity and one or more DNA modifying enzymes.

Claim 60 (New). The composition of claim 59, wherein at least one of said

polypeptides is a DNA polymerase.

Claim 61 (New). The composition of claim 60, wherein at least one of said DNA polymerases is selected from the group consisting of *Thermus aquaticus* (Taq) DNA polymerase, *Thermotoga neoplitana* (Tne) DNA polymerase, *Thermotoga maritima* (Tma) DNA polymerase, *Thermococcus litoralis* (Tli or VENT®) DNA polymerase, *Pyrococcus furiosus* (Pfu) DNA polymerase, DEEPVENT™ *Pyrococcus* species GB-D DNA polymerase, *Pyrococcus woosii* (Pwo) DNA polymerase, *Bacillus sterothermophilus* (Bst) DNA polymerase, *Bacillus caldophilus* (Bca) DNA polymerase, *Sulfolobus acidocaldarius* (Sac) DNA polymerase, *Thermoplasma acidophilum* (Tac) DNA polymerase, *Thermus flavus* (Tfl/Tub) DNA polymerase, *Thermus ruber* (Tru) DNA polymerase, *Thermus brockianus* (DYNAZyME™) DNA polymerase, *Methanobacterium thermoautotrophicum* (Mth) DNA polymerase, and mutants, variants and derivatives thereof.

Claim 62 (New). The composition of claim 60, wherein at least one of said polymerases is Taq DNA polymerase.

Claim 63 (New). The composition of claim 60, wherein at least one of said polymerases is Pfu DNA polymerase.

Claim 64 (New). The composition of claim 59, wherein at least one of said DNA modifying enzymes is selected from the group consisting of ligases, kinases, phosphatases, nucleases, endonucleases, topoisomerases, gyrases, and transferases.

Claim 65 (New). The composition of claim 59, wherein at least one of said DNA modifying enzymes is a ligase.

Claim 66 (New). The composition of claim 59, wherein at least one of said DNA modifying enzymes is a nuclease.

Claim 67 (New). The composition of claim 59, wherein at least one of said DNA modifying enzymes is an endonuclease.

Claim 68 (New). The composition of claim 60, further comprising one or more DNA polymerase inhibitors.

Claim 69 (New). The composition of claim 68, wherein at least one DNA polymerase inhibitor is selected from the group consisting of antibodies or fragments thereof, chemical compounds, antibiotics, heavy metals, metal chelators, nucleotide analogs, sulfhydryl reagents, anionic detergents, polyanions, captan, and acidic polysaccharides.

Claim 70 (New). The composition of claim 68, wherein at least one of said DNA polymerase inhibitors is an antibody.

Claim 71 (New). A composition comprising two or more polypeptides having polymerase activity and one or more DNA modifying enzymes.

Claim 72 (New). The composition of claim 71, wherein at least one of said polypeptides is a DNA polymerase.

Claim 73 (New). The composition of claim 72, wherein at least one said DNA polymerases is selected from the group consisting of *Thermus aquaticus* (Taq) DNA polymerase, *Thermotoga neoplitana* (Tne) DNA polymerase, *Thermotoga maritima* (Tma) DNA polymerase *Thermococcus litoralis* (Tli or VENT®) DNA polymerase *Pyrococcus furiosus* (Pfu) DNA polymerase, DEEPVENT™ *Pyrococcus* species GB-D DNA polymerase, *Pyrococcus woosii* (Pwo) DNA polymerase, *Bacillus sterothermophilus* (Bst) DNA polymerase, *Bacillus caldophilus* (Bca) DNA polymerase, *Sulfolobus acidocaldarius* (Sac) DNA polymerase, *Thermoplasma acidophilum* (Tac) DNA polymerase, *Thermus flavus* (Tfl/Tub) DNA polymerase, *Thermus ruber* (Tru) DNA polymerase, *Thermus brockianus* (DYNAZyME™) DNA polymerase, *Methanobacterium thermoautotrophicum* (Mth) DNA polymerase, and mutants, variants and derivatives thereof.

Claim 74 (New). The composition of claim 72, wherein at least one of said polymerases is Taq DNA polymerase.

Claim 75 (New). The composition of claim 72, wherein at least one of said polymerases is Pfu DNA polymerase.

Claim 76 (New). The composition of claim 71, wherein at least one of said DNA

modifying enzyme is selected from the group consisting of ligases, kinases, phosphatases, nucleases, endonucleases, topoisomerases, gyrases, and transferases.

Claim 77 (New). The composition of claim 71, wherein at least one of said DNA modifying enzymes is a ligase.

Claim 78 (New). The composition of claim 71, wherein at least one of said DNA modifying enzymes is a nuclease.

Claim 79 (New). The composition of claim 71, wherein at least one of said DNA modifying enzyme is an endonuclease.

Claim 80 (New). The composition of claim 71, further comprising one or more DNA polymerase inhibitors.

Claim 81 (New). The composition of claim 80, wherein at least one DNA polymerase inhibitor is selected from the group consisting of antibodies or fragments thereof, chemical compounds, antibiotics, heavy metals, metal chelators, nucleotide analogs, sulfhydryl reagents, anionic detergents, polyanions, captan, and acidic polysaccharides.

Claim 82 (New). The composition of claim 81, wherein at least one of said DNA polymerase inhibitors is an antibody or fragment thereof.

Claim 83 (New). The composition of claim 71, wherein at least one of said polypeptides is a reverse transcriptase or fragment thereof.

Claim 84 (New). The composition of claim 83, wherein at least one of said reverse transcriptases has substantially reduced RNase H activity.

Claim 85 (New). The composition of claim 83, wherein at least one of said reverse transcriptases is selected from the group consisting of Moloney Murine Leukemia Virus (M-MLV) reverse transcriptase, Rous Sarcoma Virus (RSV) reverse transcriptase, Avian Myeloblastosis Associated Virus (RAV) reverse transcriptase, Myeloblastosis Associated Virus (MAV) reverse transcriptase, Human Immunodeficiency Virus (HIV) reverse transcriptase, retroviral reverse transcriptase, retrotransposon reverse transcriptase, hepatitis B reverse transcriptase, cauliflower mosaic virus reverse transcriptase, bacterial reverse transcriptase, *Thermos thermophilus* (Tth).

Claim 86 (New). A composition comprising at least one DNA polymerase, at least one ligase, and at least one endonuclease.

Claim 87 (New). The composition of claim 86, wherein the composition contains at least two DNA polymerases.

Claim 88 (New). The composition of claim 86, wherein at least one DNA polymerase is Taq DNA polymerase.

Claim 89 (New). The composition of claim 86, wherein at least one DNA polymerase is Pfu DNA polymerase.

Claim 90 (New). The composition of claim 86, wherein at least one endonuclease is a restriction endonuclease.

Claim 91 (New). The composition of claim 87, wherein at least one DNA polymerase is Taq DNA polymerase and at least one DNA polymerase is Pfu DNA polymerase.

Claim 92 (New). The composition of claim 91, wherein at least one endonuclease is a restriction endonuclease.